



Indian Health Service • Electronic Health Record

**Indian Health Service Electronic Health Record
Information for IHS Area Directors
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In the past several months there has been considerable attention directed to, and excitement generated by, the ongoing project to produce an electronic health record for use in Indian health care facilities. The purpose of this brief document is to apprise you of progress to date and of future plans for the IHS-EHR.

Previous Development

- In December 2001 ITSC released the first multifunctional Graphical User Interface (GUI) for RPMS, called Patient Chart. Many I/T/U facilities have implemented this application, which facilitates access to patient information contained in a variety of RPMS packages and permits direct entry of problems, measurements, and other data.
- A prototype electronic health record based on a graphical framework developed by the VA has been used by a few providers at the Crow Indian Hospital since the summer of 2002. It allows for direct entry of orders and prescriptions by the provider, and for use of keyboard entry or templates for clinical notes. This important preliminary work has served both to illustrate the possibilities for an electronic health record in the Indian health care setting and to disclose a number of issues that need to be addressed before an EHR product is ready for general use.

Work in Progress

- A Clinical Advisory Team (EHR-CAT) has been selected to determine the specific clinical requirements for an electronic health record. The EHR-CAT consists of physicians, nurses, and other practicing clinicians representing IHS and Tribal facilities across the country. This group will meet in February, and over the next several months will actively review and refine the near- and long-term plans for EHR functionality.
- Existing Patient Chart functions have been ported into the graphical framework used in the Crow EHR prototype. This framework allows for integration of a variety of RPMS and non-RPMS programs into a display that permits the user to have simultaneous access to all of them.
- The new Behavioral Health RPMS package (BHS 3.0) permits full electronic documentation of clinical encounters. A GUI “front end” compatible with the proposed EHR framework is in development, which will make the Behavioral Health System considerably more intuitive and usable for staff who are most comfortable with Windows-type computers.
- Professional usability consultants contracted by the BHS development team will be evaluating the BHS GUI to ensure that it is maximally useful and accessible to all users. The IHS-EHR development team intends to take advantage of this expertise by adopting the appearance and flow of the BHS GUI. By standardizing the general characteristics of the graphical user interfaces that we develop, we will facilitate acceptance and minimize training requirements.
- Planning is underway to alpha test an EHR prototype at another facility this spring. This test will utilize formal benchmarking and evaluation processes for both technical installation and end-user acceptance. Lessons learned will be used to document planning, installation, and training procedures for I/T/U-wide deployment.

Comments

- ITSC will soon hire a full time Project Manager to coordinate and direct the development and deployment of the IHS Electronic Health Record.
- The IHS Electronic Health Record that is currently envisioned will be highly componentized and customizable to the needs and capabilities of the various facilities that use it. Rather than deploying it as one monolithic product, componentization will minimize the amount of upgrading of “back-end” RPMS packages that needs to be done before the EHR can be used.
- While the capabilities of the EHR at a given facility will be determined by the versions of RPMS programs running in the background, componentization will allow facilities to set their own pace for upgrading these systems while still taking advantage of the electronic record.
- A certain degree of hardware infrastructure upgrading will be required of any facility attempting to use an electronic health record. All providers will need access to the system at the point of care, and the EHR can be expected to place new demands on RPMS servers and network systems.
- The speed at which the IHS-EHR becomes a deployable product will depend heavily on funding, but IHS leadership has been most supportive. Indications are that DIR will be provided with the resources necessary to make the EHR a reality in the near future.
- An IHS-EHR web page (www.ihs.gov/cio/ehr) will be launched this month, and will keep you informed of progress on this project. You are also encouraged to visit the EHR and BHS demonstration booths at the annual Four Councils meeting next week, and to attend the IHS-EHR workshop on February 11. This is an exciting time for all of us involved in the IHS-EHR project, and we appreciate your interest and support.